

Limitwise monotonic reducibility on sets and on pairs of sets

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Abstract

© 2016, Allerton Press, Inc. We study limitwise monotonic sets and pairs of sets. We investigate the properties of limitwise monotonic reducibility between sets and pairs of sets defined in terms of Σ -reducibility corresponding to initial segment of sets. In addition, we obtain a description of Σ -reducibility of families of a special form in terms of Im -reducibility. At the same time we show the relationship of concepts of Im -reducibility and Σ -reducibility between the pairs of sets.

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Keywords

computable functions, family of subsets of natural numbers, limitwise monotonic function, limitwise monotonic reducibility, limitwise monotonic sets, pair of sets, Σ -reducibility, Σ -sets 2 0